IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Minoru NISHIDA et al.

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Appl. No.

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Examiner

: T.F. Simone

Docket No.:

: NISH3003/REF

Customer No:

: 23364

Title

: METHOD OF PREPARING FRY COOKED PRODUCT

AND FRY COOKING DEVICE

APPEAL BRIEF

This brief on appeal is submitted with the required appeal fee under 37 CFR 1.17(c). The first due date for response for this brief was June 16, 2009. Appellants submit with this brief a Petition for a Two-Month Extension of Time to extend the due date for response to August 16, 2009. This brief is therefore timely filed.

(i) Real Party in Interest

The real party in interest in this appeal is the assignee The Nisshin Ollio Group, Ltd of Tokyo, Japan.

(ii) Related Appeals and Interferences

None.

(iii) Status of Claims

Claims 1-61 are pending in this application. The present appeal is taken from the final rejection of claims 10-15 and 34-35. Claims 53-61 are withdrawn. Claims 1-9, 16-33, and 36-52 have been canceled without prejudice or disclaimer.

(iv) Status of Amendments

No amendments to the claims have been requested subsequent to the final rejection on appeal.

(v) Summary of Claimed Subject Matter

The inventors of the claimed invention have discovered a fry cooking device that provides a superior fried food product.

Claim 10 is directed to a fry cooking device, comprising one or more frying oil vessels, wherein the one or more frying vessels have a substantially parallelepiped shape with four sidewalls and a single bottom wall that satisfies a relationship of HB/SB^{1/2} = 1.1 to 3.0, where SB denotes an area of an open portion of the vessel, and HB denotes the depth of the vessel (present specification, page 46, lines 15-25), wherein the frying vessel may form therein a frying oil layer meeting a relationship of HA/SA^{1/2}= 0.63 to 3.5, wherein SA denotes a surface area of the frying oil layer and HA denotes the height from the bottom to the surface of the frying oil layer (page 10, lines 16-23), and wherein a frying zone is provided within which a frying ingredient is actually subjected to frying cooking, the frying zone covering at least 80% of the distance

between the surface and the bottom of the frying oil layer (page 15, line 5 to page 16, line 7; page 18, lines 1-8; page 49, lines 6-10 and Figure 2).

Claim 13 is dependent on claim 10 and is directed to a fry cooking device, which comprises a heater unit for heating the frying oil arranged on the outside of the frying oil vessel (page 49, lines 14-16 and original claim 13).

(vi) Grounds of Rejection to be Reviewed on Appeal

The issues on appeal are as follows:

- I) whether claims 10-12, 14- 15 and 34-35 are obvious under 35 U.S.C. 103(a) in view of JP 2000-271018; and
- II) whether claim 13 is obvious under 35 U.S.C. 103(a) in view of JP 2000-271018.

(vii) Argument

<u>CLAIMS 10-12, 14-15 AND 34-35 ARE NOT OBVIOUS IN VIEW OF JP 2000-27108</u> CLAIM 10

Appellants respectfully submit that the Final Rejection fails to satisfy its burden in showing that JP 2000-27108 renders obvious a device having a HB/SB^{1/2} relationship of 1.1 to 3.0, a HA/SA^{1/2} relationship of 0.63 to 3.5, or a frying zone covering at least 80% of the distance between the surface and the bottom of the frying oil layer, as claimed. The legal concept of *prima facie* obviousness is a procedural tool of examination which applies broadly to all arts. It allocates who has the burden of going forward with

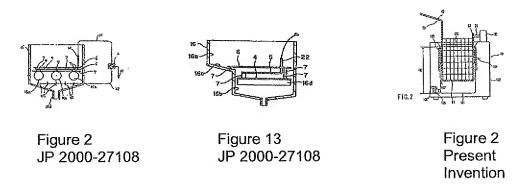
production of evidence in each step of the examination process. See *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Saunders*, 444 F.2d 599, 170 USPQ 213 (CCPA 1971); *In re Tiffin*, 443 F.2d 394, 170 USPQ 88 (CCPA 1971), *amended*, 448 F.2d 791, 171 USPQ 294 (CCPA 1971); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness (see also MPEP § 2142).

The Final Rejection contends that it would have been "an obvious matter of design choice to have the prior art frying vessel have a shape longer in the vertical direction than in the lateral direction, since the invention would perform equally well" and that the claimed recitations merely reflect the "optimum or workable ranges" involving routine skill in the art. However, the Final Rejection fails to provide any evidence in support of these allegations. For this reason alone, Appellants respectfully submit that the rejection is improper as a matter of law.

Nevertheless, Appellants note that while a full translation of JP 2000-27108 has not been provided, it appears that JP 2000-27108 actually leads one skilled in the art away from the claimed invention. Claim 10 recites that one or more of the frying vessels have a substantially parallelepiped shape with four sidewalls and a single bottom wall that satisfies a relationship of HB/SB^{1/2} = 1.1 to 3.0. SB denotes an area of an open portion of the vessel. HB denotes the depth of the vessel. In other words, the depth of the vessel must be of a sufficient depth relative to the area of the open portion of the vessel to provide a value of 1.1 to 3.0.

The frying devices of JP 2000-27108 stand in contrast to the claimed invention. The abstract of JP 2000-27108 recites that the "distance between the tubes 15a and the upper end of the wall surface of the tub 15 is extended to form a space sufficient for soaking food material in edible oil over the net 5". Appellants respectfully submit that this suggests extending the upper end of wall 15 lengthwise. This is evident upon viewing Figures 2 and 13 of JP2000-271018.

The frying devices of JP 2000-27108 and the present invention are shown as follows:



Both Figures 2 and 13 show a frying device having an area of an open portion of the vessel that is greater than the depth of the vessel. Moreover, when the upper wall of the fry cooking device is extended, it appears to be extended lengthwise (see Figure 13). Thus, there is no evidence to suggest that JP2000-271018 satisfies the claimed HB/SB^{1/2} relationship.

There is also no discussion of a fry cooking device having an HA/SA^{1/2} relationship of 0.63 to 3.5, or a frying zone covering at least 80% of the distance between the surface and the bottom of the frying oil layer, as claimed. The JP 2000-271018 publication discloses a frying oil vessel 15 having a cubic shape. However, the frying zone of the frying oil vessel 15 is only a portion above a protective member (cover

mesh) 6. The frying zone cannot cover at least 80% of the distance between the surface and the bottom of the frying oil layer as recited by claim 10.

In view of the above, it appears that JP2000-271018 actually leads one skilled in the art away from the claimed invention.

Appellants further note that the specification recites numerous examples that provide evidence as to the improved/unexpected results that are exhibited by the claimed invention. The Patent Office must consider objective indicia of nonobviousness whenever present. Specifically, the Patent Office is bound to consider evidence of unexpected results, commercial success, long-felt but unresolved needs, failure of others, skepticism of experts. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 f. 2d 1530, 1538 (Fed Cir. 1983). Federal Circuit precedent mandates consideration of comparative data in the specification which is intended to illustrate the claimed invention in reaching a conclusion with regard to the obviousness of the claims. *In re Margolis*, 785 F. 2d 1029 (Fed Cir. 1986). (Vacating Board decision which refused to consider data in the specification which compared an embodiment of the invention with the prior art product and noting that such evidence spoke to unexpected results and non-obviousness).

Example 1 compares a cooking device in accordance with the claimed invention to a conventional fry cooking device (see page 78, line 24 to page 61, line 2). The results are reported in FIGS. 13 to 16. FIGS. 13 to 16 show that the fry cooking device of the present invention can significantly suppress the deterioration of frying oil as compared to other frying devices.

Table I on page 56 shows the width, length, height (HB), vol., oil surface area (SA), open portion area(SB), maximum height of oil(HA), HB/SB^{1/2} relationship, HA/SA^{1/2} relationship and loading rates for eight frying cooking devices in accordance

with the claimed invention. Table 1 compares these values to those found in eight conventional frying cooking devices. None of the conventional devices exhibit the HB/SB^{1/2} relationship or HA/SA^{1/2} relationship, as claimed.

Table 1 shows that a fry cooking device in accordance with the claimed invention provides a higher loading rate. The present specification explains at page 18, lines 9-21 that it is desirable for a prescribed amount of frying ingredients to be cooked with a small amount of frying oil. In other words, the loading rate of the frying ingredients should be as high as possible. In this regard, Appellants respectfully submit that the claimed invention exhibits unexpected results. At the very least, the results show that not all fry cooking devices perform equally as well.

Example 2 provides further evidence that the claimed fry cooking device significantly suppresses the deterioration of frying oil relative to a conventional fryer. This Example also indicates with reference to TABLES 2 to 7 that fried materials produced in accordance with the present invention have better appearances and that the peeling-off area of the bread powder coating was significantly reduced. Excellent results were also obtained in the organoleptic evaluation, wherein it was found that the amount of oil absorbed by a bread powder coating was significantly small, the amount of oil in a coating was significantly small, the amount of oil consumed during cooking was significantly small, and the amount of the frying refuse was small relative to conventional devices.

Further evidence of unexpected results is set forth in Examples 3 to 17 and Figure 17-26. For example, Figures 17-26 that show frying an ingredient with the claimed device provides improved acid value, chromaticity, amounts of polymerized material, and kinetic viscosity relative to using other frying devices.

In view of the above, Appellants respectfully submit that the Final Rejection fails to provide any evidence that it would have been "an obvious matter of design choice to have the prior art frying vessel have a shape longer in the vertical direction than in the lateral direction, since the invention would perform equally well", whereas the present specification provides evidence that contradicts this unsupported allegation.

Moreover, a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (The claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result- effective variable.). See also In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (prior art suggested proportional balancing to achieve desired results in the formation of an alloy).

The JP 2000-27108 publication neither discloses nor suggests a device having a HB/SB^{1/2} relationship of 1.1 to 3.0, a HA/SA^{1/2}, a relationship of 0.63 to 3.5, or frying zone covering at least 80% of the distance between the surface and the bottom of the frying oil layer, as claimed. As these recitations are not even recognized by the publication, it cannot be said that these recitations were recognized as result effective variables. Accordingly, there is no evidence to suggest that one skilled in the art would have considered any of the recitations set forth in the claims as an "optimum or workable range".

In view of the above, Appellants respectfully request that the obviousness

rejection be reversed.

CLAIM 13 IS NOT OBVIOUS IN VIEW OF JP 2000-27108 CLAIMS

Claim 13

Claim 13 is directed to a fry cooking device according to claim 10, wherein a heater unit for heating frying oil is arranged on the outside of the frying oil vessel. However, as noted above, JP 2000-27108 is directed to a frying device wherein the heater device is located within the frying vessel (i.e., see heat tubes 15). The publication does not suggest a device with a heater unit arranged on the outside of the frying oil vessel. This plainly stands in contrast to claim 13.

Appellants respectfully request that the rejection be reversed.

From the foregoing discussion, Appellants respectfully submit that the rejection of claims 10-15 and 34-35 is improper and should be reversed. Such action is accordingly respectfully requested.

Please charge the fee for this brief on appeal to 37 CFR 41.20(b)(3), along with any additional fees that are required to Deposit Account No. 02-200.

Respectfully submitted,

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(viii) Claims Appendix

1-9. Canceled.

- 10. A fry cooking device, comprising one or more frying oil vessels, the frying vessel having substantially parallelepiped shape with four sidewalls and a single bottom wall and satisfying a relationship of HB/SB^{1/2} = 1.1 to 3.0, where SB denotes an area of an open portion of the vessel, and HB denotes the depth of the vessel, wherein the frying vessel may form therein a frying oil layer meeting a relationship of HA/SA^{1/2}= 0.63 to 3.5 where SA denotes a surface area of the frying oil layer, and HA denotes the height from the bottom to the surface of the frying oil layer, and wherein a frying zone is provided within which frying ingredient is actually subjected to frying cooking, the frying zone covering at least 80% of the distance between the surface and the bottom of the frying oil layer.
- 11. The fry cooking device according to claim 10, further comprising a fluororesin coating layer in an upper portion on an inner surface of the frying oil vessel.
- 12. The fry cooking device according to claim 10, wherein a frying oil supply mechanism for supplying a frying oil is mounted on the frying oil vessel.
- 13. The fry cooking device according to claim 10, comprising a heater unit for heating the frying oil arranged on an outside of the frying oil vessel.

14. The fry cooking device according to claim 10, comprising a lid for opening and closing the frying oil vessel.

15. The fry cooking device according to claim 10, comprising a lift mechanism of a frying ingredient carrier introducing frying ingredients into the frying oil vessel, the lift mechanism being configured to put the frying ingredient carrier in and out of the frying oil vessel.

16-33. Canceled

34. A fry cooking device set, comprising a fry cooking device according to claim 10, and an ingredient carrier capable of holding flat frying ingredients such that a flat surface of the frying ingredients makes an angle of 45° to 135° with a horizontal plane.

35. A fry cooking device set, comprising a fry cooking device according to claim 10, and an ingredient carrier provided with a plurality of racks on which frying ingredients are disposed.

36-52. Canceled

53-61. Withdrawn

(ix) Evidence Appendix

None

(x) Related Proceedings Appendix

None